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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,417	01/26/2004	Hajime Yagi	045237-0128	4715

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FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER	
MAKIYA, DAVID J	

ART UNIT	PAPER NUMBER
2885	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/763,417	YAGI, HAJIME	
	Examiner	Art Unit	
	David J. Makiya	2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5-7,9,10,12-18 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5-7,9,10,12-18 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/30/07,3/19/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 5, 7, 9, 10, 12-17, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez Barros et al. (US 2003/0169160) in view of Misaiji et al. (US 2003/0098908).

With respect to claim 1, Rodriguez Barros et al. teach an outside mirror for a vehicle, comprising a mirror base E configured to mount to the vehicle; a mirror housing D connected to the mirror base; an image capturing unit (Paragraph 1); and a visible-light emitting unit 30 that emits visible light (Paragraph 3), wherein the visible-light emitting unit functions as any one of a side-turn lamp, a side marker lamp, or a turn lamp of a front combination lamp of the vehicle (Paragraph 8).

However, Rodriguez Barros et al. fail to teach the arrangement of the image capturing unit relative to the image capturing window or their location within the housing.

Misaiji et al. teach an outside mirror for a vehicle comprising a mirror housing 2, an image capturing unit 20 including an image capturing window (Figure A) which is disposed slightly downward (Figure 3); and a visible light emitting unit 30 including a lens (10; Figure A), the visible light emitting unit is configured to emit visible light, wherein the lens is disposed in a substantially horizontal direction (Figures 5, 7), a direction in which the lens faces deviates from

a direction in which the image capturing window faces (Figure A), wherein the visible light emitting unit is arranged such that the visible light emitted does not directly enter (12; Paragraph 43) into the image capturing unit and the image capturing unit and the visible light emitting unit mounted in the mirror housing (Figure 7).

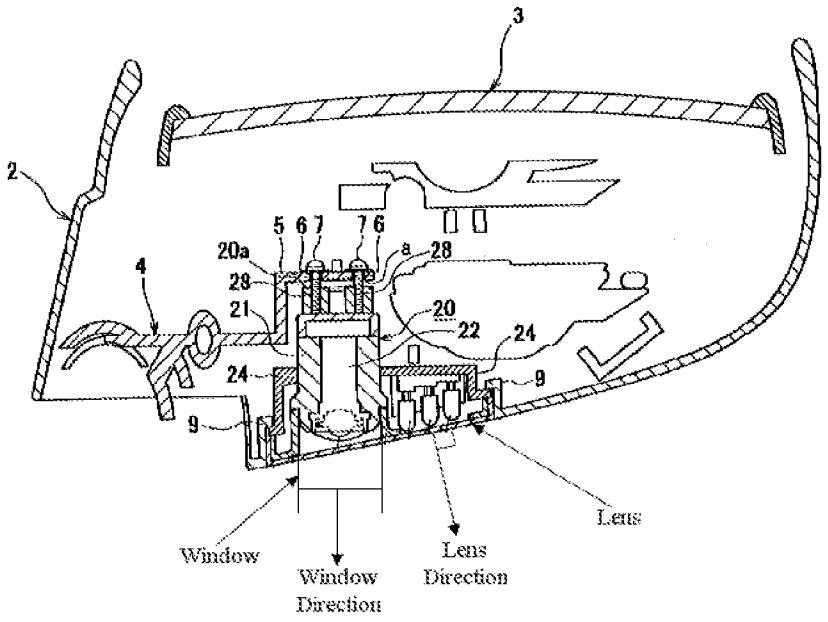

Figure A: Lens and window directions of Misaiji et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the assembly of Rodriguez Barros et al. to add the arrangement of the image capturing unit and light emitting unit within the mirror housing from teachings of Misaiji et al. because "the shielding element 12 prevents not only undesired light from entering the lens 23 of the CCD camera 22 but also dust and water from intruding into the neighborhood of the lens 23 in collaboration with the transparent cover 10. It improves image clearness and prevents deterioration of a field of view due to unclear images caused by the soiled lens" and "a plurality of luminous bodies 30 such as light emitting diodes (LEDs) are provided around the shielding

element 12 of the first embodiment and the light emitted by the luminous bodies 30 is directed through the transparent cover 10 to an imaging area taken by the camera 20. Thus the quality of acquired images is much more improved, especially when the vehicle A is in a launching operation at night" (Misaiji et al.; Paragraphs 43 and 54).

With respect to claim 3, Rodriguez Barros et al. teach the outside mirror wherein the visible-light emitting unit includes a visible-light distribution controller 6 that controls the distribution of the visible light emitted within a predetermined range (Figure 44), wherein the visible-light distribution controller is configured as a reflector or a prism (Paragraph 118).

With respect to claim 5, Rodriguez Barros et al. teaches the outside mirror wherein the visible-light emitting unit is provided as a unit part (Figure 44).

With respect to claim 7, Rodriguez Barros et al. teach the outside mirror further comprising an infrared emitting unit 25-A that emits infrared radiation (Paragraph 100).

With respect to claim 9, Rodriguez Barros et al. teach the outside mirror wherein the infrared emitting unit includes an infrared distribution controller 7 that controls distribution of the infrared radiation emitted within a predetermined range (Figure 85).

With respect to claim 10, Rodriguez Barros et al. teach the outside mirror wherein the infrared emitting unit includes an infrared radiation distribution controller 7 that controls distribution of the infrared radiation emitted within a predetermined range (Figure 85); and the visible-light emitting unit includes a visible-light distribution controller 6 that controls distribution of the visible light emitted within a predetermined range (Paragraph 118).

With respect to claim 12, Rodriguez Barros et al. teach the outside mirror further comprising a second lens 7 that transmits the infrared radiation emitted.

With respect to claim 13, Rodriguez Barros et al. teaches the outside mirror wherein the infrared emitting unit is provided as a unit part (Figure 33).

With respect to claim 14, Rodriguez Barros et al. teach the outside mirror wherein the infrared emitting unit includes an infrared source (Paragraph 100), the infrared source includes at least one infrared light-emitting-diode that emits the infrared radiation (Paragraph 232), the visible-light emitting unit includes a visible-light source (Paragraph 100), and the visible-light source includes at least one visible light-emitting-diode that emits the visible light (Paragraph 232).

With respect to claim 15, Rodriguez Barros et al. teach the outside mirror wherein the infrared light-emitting-diode is mounted on another surface of the substrate (Figure 33).

With respect to claim 16, Rodriguez Barros et al. teaches the outside mirror wherein both the infrared light-emitting diode and the visible light-emitting diode are surface mounted (Figure 33).

With respect to claim 17, Rodriguez Barros et al. teach the outside mirror wherein the substrate is a flexible substrate (Paragraph 232).

With respect to claim 22, Rodriguez Barros et al. teach an outside mirror for a vehicle, comprising a mirror base E configured to mount to the vehicle; a mirror housing D connected to the mirror base; an image capturing unit (Paragraph 1); and a visible-light emitting unit 30 that emits visible light (Paragraph 3), wherein the visible light emitting unit functions as any one of a

side-turn lamp, a side marker lamp, or a turn lamp of a front combination lamp of the vehicle (Paragraph 8).

Rodriguez Barros et al. fail to teach the arrangement of the image capturing unit relative to the image capturing window or their location within the housing.

Misaiji et al. teach an outside mirror for a vehicle comprising a mirror housing 2, an image capturing unit 20 including an image capturing window (Figure A); and a visible light emitting unit 30 including a lens (10; Figure A), the visible light emitting unit is configured to emit visible light, wherein the lens is located at a position closer to a rear side of the vehicle than a position of an outer opening of the image capturing window is to the rear side of the vehicle (Figure B), wherein the visible light emitting unit is arranged such that the visible light emitted does not directly enter (12; Paragraph 43) into the image capturing unit and the image capturing unit and the visible light emitting unit mounted in the mirror housing (Figure 7), the image capturing unit and the visible-light emitting unit are mounted in the mirror housing (Figure 7).

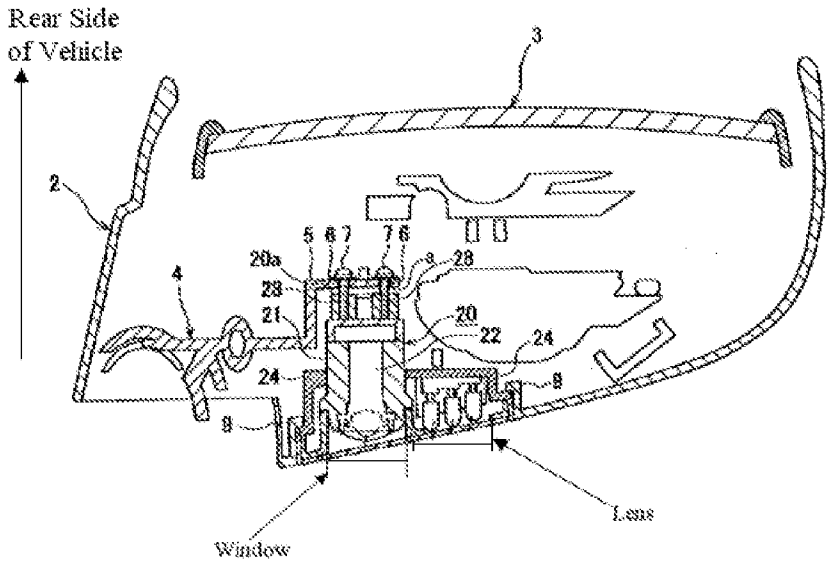

Figure B: Location of lens and window of Misaiji et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the assembly of Rodriguez Barros et al. to add the arrangement of the image capturing unit and light emitting unit within the mirror housing from teachings of Misaiji et al. because "the shielding element 12 prevents not only undesired light from entering the lens 23 of the CCD camera 22 but also dust and water from intruding into the neighborhood of the lens 23 in collaboration with the transparent cover 10. It improves image clearness and prevents deterioration of a field of view due to unclear images caused by the soiled lens" and "a plurality of luminous bodies 30 such as light emitting diodes (LEDs) are provided around the shielding element 12 of the first embodiment and the light emitted by the luminous bodies 30 is directed through the transparent cover 10 to an imaging area taken by the camera 20. Thus the quality of acquired images is much more improved, especially when the vehicle A is in a launching operation at night" (Misaiji et al.; Paragraphs 43 and 54).

Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez Barros et al. in view of Misaiji et al. as applied to claims 1 and 7 above, and further in view of Chu (US Patent 6,520,690).

With respect to claims 6 and 18, Rodriguez Barros et al. in view of Misaiji et al. teach the outside mirror as described above, but fail to teach a mechanism configured to be tilted by manual or remote operation.

Chu teaches an outside mirror for a vehicle comprising an image capturing unit and a light emitting unit 31 wherein the image capturing unit 3 having a mechanism 2A configured to be tilted by manual operation or by remote operation (Column 2, Lines 53-60).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mirror of Rodriguez Barros et al. in view of Misaiji et al. further with the teachings of Chu because providing a tilting mechanism means "the camera lens 3 can be adjusted to a suitable shooting angle" (Chu; Column 2, Lines 49-52).

Response to Arguments

Applicant's arguments filed 1/30/2008 have been fully considered but they are not persuasive.

In response to the applicant's arguments regarding the direction of the lens and window, Figure A of Misaiji et al. shows the window is the opening for the camera 22 and the lens is the cover 10. As the figure shows, the opening has a different direction than the lens and therefore meets the limitation as claimed.

In response to the applicant's arguments regarding the "lens is disposed in a substantially horizontal direction," Figures 3-7 of Misaiji et al. show the lens extends in a substantially horizontal direction as claimed. Furthermore, claim 1 of Misaiji et al. states the invention is on the "under portion 2b of the mirror housing 2" (Paragraph 40) and the lens would therefore extend along the bottom surface, parallel to the ground in a horizontal direction.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Boddy et al. (US 2004/0208015) teaches an outside mirror with a visible light emitting unit with different functions.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Makiya whose telephone number is (571) 272-2273. The examiner can normally be reached on Monday-Friday 7:30am - 4:00pm (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DJM/
05/05/2008

/Y M. Lee/
Primary Examiner, Art Unit 2885